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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/618,761	07/15/2003	Makoto Ouchi	240348US0X	8453

22850 7590 12/09/2004

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EXAMINER

REDDICK, MARIE L

ART UNIT PAPER NUMBER

1713

DATE MAILED: 12/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/618,761

Applicant(s)

OUCHI ET AL.

Examiner

Judy M. Reddick

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07/15/03;10/21/03.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/15/03.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Information Disclosure Statement

2. The information disclosure statement filed 07/15/03 has been considered and scanned into the application file. The Document Number AA (U.S. 6,471,294 B1) is inconsistent with the Name (Shoji OBUCHI et al). The correct Number for this Document is U.S. 6,417,294 as is now reflected on the FORM PTO 1449.

Drawings

3. The drawings filed in this application on 07/15/03 are acceptable for examination purposes only.

Claim Rejections - 35 USC § 112

4. The following is a quotation of the second paragraph of 35 U.S.C. 112:  
  
The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter that the applicant regards as his invention.
5. Claims 1-7 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
  - A) The recited "low molecular weight compound which has an amide group" per claim 1 constitutes indefinite subject matter as per the metes and bounds of such engender indeterminacy in scope. There are two separate requirements set forth in the § 112, second paragraph: (A) the claims must set forth the subject matter that applicants regard as their invention; and (B) the claims must particularly point out and distinctly define the metes and bounds of the subject matter that will be protected by the patent grant.  
  
See M.P.E.P. § 2171.
  - B) The recited "wherein the molecular weight of the low molecular compound is 1,000 or less" per claim 2 constitutes indefinite subject matter as per it not being readily ascertainable as to if "weight average" or "number average" is intended, the two being substantially different as evidenced via any basic polymer chemistry textbook.  
  
"Patent examiner's decision to reject applicants' patent claims, directed to blend of linear low density polyethylene and

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high density polyethylene, for failure to adequately define term "molecular weight" is affirmed, even though applicants submitted declaration of inventor indicating that persons of ordinary skill in art would realize that "weight average molecular weight" was intended, since molecular weight can be measured in several different ways, since Manual of Patent Examining Procedure states that factual testimony is preferred over opinion testimony, since inventor's opinion is not supported by adequate documentation in record, and since applicants, therefore, have failed to establish that examiner erred in declining to accord inventor's testimony controlling weight; examiner's finding that inventor's opinion was "self-serving" relates to inventor's interest in outcome of case, which examiner was entitled to factor into analysis, and such finding should not be read as questioning inventor's good faith." Ex parte Simpson 61 USPQ2d 1009 (2001).

C) The recited "low molecular weight" compound is a hydroxyamide and/or bis-amide" per claim 3 constitutes indefinite subject matter as per it not being readily ascertainable if or how said objectionable phrase "and/or" further limits the antecedently recited "a low molecular weight compound". Further, the metes and bounds of "low molecular weight" engender indeterminacy in scope.

D) The recited "molded body" per claim 7 constitutes indefinite subject matter as per the metes and bounds of "body" engender indeterminacy in scope.

## Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this

Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

8. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

9. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Topolkaraev et al (U.S. 6,451,895 B1) in combination with JP 10-081815 (Abstract) or JP 06299054 A (Abstract).

Topolkaraev et al teach water responsive, environmentally degradable compositions, films and molded articles therefrom wherein said compositions are defined basically as containing a water-responsive polymer, an organically modified clay or layered silicate sufficient to meet the layered clay mineral per the instant claims, biologically degradable polymer such as poly (lactic acid), particulate fillers such as talc and other conventional additives such as processing aids, slip additives, etc. (Abstract, , col. 3, lines 20-67, col. 4, lines 1-3 & 54-67, col. 5, lines 15-38, col. 7, lines 5-24 & 65-67 & cols. 8-10).

The disclosure of Topolkaraev et al differs basically from the claimed invention as per the non-specific guidelines to use, as a conventional additive, a low molecular weight compound which has an amide group such as a hydroxyamide or a bisamide. However, each of JP'815 and JP'054 teach the addition of an amide compound, sufficient to meet the claimed amide compound in terms of kind and molecular weight, to a poly (lactic acid)-containing molding composition so as to enhance the processability. Therefore, it would have been obvious to the skilled artisan to add an amide compound, as a conventional additive, to the composition of Topolkaraev et al and with a reasonable expectation of obtaining its cumulative additive effect, i.e., enhancing the processability of the composition of patentee, absent a clear showing of criticality commensurate in scope with the claims.

As to the dependent claims, the limitations, if not taught or suggested, would have been obvious to the skilled artisan and with a reasonable expectation of success, i.e., any additional or particular claim parameters which may not be specifically set out in the references are considered to be inherent in the reference products or not to involve anything unobvious absent a showing to the contrary.

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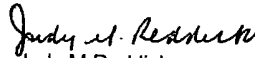
Conclusion


10. The prior art to Nair et al (U.S. 6,767,951 B2), listed on the attached FORM PTO 892, is cited as of interest in teaching polyester nanocomposites comprising a matrix polymer and clay. A rejection, in the future, may be made based on this prior art. However, since a viable rejection is outstanding, a rejection at this time is not being made. The additional prior art, listed on the attached FORM PTO 892, is cited as being illustrative of the general state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Judy M. Reddick whose telephone number is (571) 272-1110. The examiner can normally be reached on 6:00 a.m.-2:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Judy M Reddick  
Primary Examiner  
Art Unit 1713

JMR   
12/07/04